

ABSTRACT OF THE DISCLOSURE

The invention discloses a method, an arrangement, and a system for ascertaining process variables. The method is characterized by multiple steps. The intensities ascertained by a plurality of detectors from different spectral regions of a measurement operation are combined into one intensity vector (\vec{I}). A norm of the intensity vector (\vec{I}) is calculated therefrom. Those intensity vectors whose norm is less than a definable threshold value (SW) are then discarded. The intensity vectors (\vec{I}) are normalized. Processing of the intensity vectors (\vec{I}) is accomplished in a vector quantizer (58). Lastly, code book vectors are read out of the vector quantizer (58).

(FIG. 2)